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Date: March 20, 2008/Jessica Sexton/  
Jessica Sexton**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re patent application of:

Applicant(s): Alex A. Kipman, *et al.*

Examiner: Zheng Wei

Serial No: 10/802,239

Art Unit: 2192

Filing Date: March 17, 2004

Title: ARCHITECTURE THAT RESTRICTS PERMISSIONS GRANTED TO A BUILD  
PROCESS**Mail Stop Appeal Brief-Patents**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, VA 22313-1450**

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**APPEAL BRIEF**

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Dear Sir:

Applicant submits this brief in connection with an appeal of the above-identified patent application. Payment is being submitted via credit card in connection with all fees due regarding this appeal brief. In the event any additional fees may be due and/or are not covered by the credit card, the Commissioner is authorized to charge such fees to Deposit Account No. 50-1063 [MSFTP582US].

**I. Real Party in Interest (37 C.F.R. §41.37(c)(1)(i))**

The real party in interest in the present appeal is Microsoft Corporation, the assignee of the present application.

**II. Related Appeals and Interferences (37 C.F.R. §41.37(c)(1)(ii))**

Appellants, appellants' legal representative, and/or the assignee of the present application are not aware of any appeals or interferences which may be related to, will directly affect, or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**III. Status of Claims (37 C.F.R. §41.37(c)(1)(iii))**

Claims 1-6 and 8-36 stand rejected by the Examiner. Claim 7 was cancelled during prior prosecution. The rejection of claims 1-6 and 8-36 is being appealed.

**IV. Status of Amendments (37 C.F.R. §41.37(c)(1)(iv))**

No claim amendments were submitted after the Final Office Action dated November 23, 2007.

**V. Summary of Claimed Subject Matter (37 C.F.R. §41.37(c)(1)(v))****A. Independent Claim 1**

Independent claim 1 is directed towards a system that facilitates management of a build process (*See e.g.*, Fig. 1 feature 100). The system comprises a processor executing a build process that utilizes one or more build entities (*See e.g.*, Fig. 1 features 102, 104 and related text at page 4 lines 5-9). The system also comprises a policy component that is processed by the processor executing the build process to determine one or more levels of trust within which the build process operates (*See e.g.*, Fig. 1 features 106, 108 and related text at page 4 lines 22-25).

**B. Independent Claim 11**

Independent claim 11 recites a system that facilitates management of a build process, comprising a processor executing a build process that processes one or more build entities (*See e.g.*, Fig. 1 features 102, 104 and related text at page 4 lines 5-9). Additionally, it also comprises one or more policy files that are processed by the build process processor to determine a

permission level within which the build process operates (*See e.g.*, Fig. 1 features 106, 108 and related text at page 4 lines 22-27).

**C. Dependent claim 17**

Claim 17 depending from independent claim 11 recites a system that operates a build process. The build process is executed at a permission level that is a lowest level of trust associated with the one or more build entities (*See e.g.*, Fig. 5 block 518 and related text at page 10 lines 27-28).

**D. Independent Claim 20**

Independent claim 20 is directed towards a computer-readable medium having computer-executable instructions for performing a method for managing a build process entities (*See e.g.*, Fig. 2 and related text at page 4 lines 29-30). The method includes receiving a build process for building one or more build entities (*See e.g.*, Fig. 2, features 200 and 204 and related text at page 5 lines 8-12). At least one of the one or more build entities is associated with a level of trust (*See e.g.*, Fig. 2, feature 208 and related text at page 5 lines 18-19). The build process is then executed at the associated level of trust (*See e.g.*, Fig. 2, feature 212 and related text at page 5 lines 20-21).

**E. Dependent Claim 21**

Claim 21 dependent on independent claim 20 recites a method of managing a build process. The method involves associating each of the one or more build entities with a corresponding representative level of trust (*See e.g.*, Fig. 2, feature 208 and related text at page 5 lines 18-19, and Fig.3 and related text at page 5 lines 24-30). The build process is then executed at the level of trust that is the minimal level of trust of all the one or more build entities (*See e.g.*, Fig. 2, block 216 and related text at page 5 lines 21-23).

**F. Independent Claim 32**

Independent claim 32 recites a system that facilitates control of a build process. The system comprises means for providing an association between at least one of one or more build entities and a level of trust (*See e.g.*, Fig. 3 features 302 and 310 and related text at page 5 lines

24-30). It also comprises means for performing the build process at the level of trust (*See e.g.*, Fig. 3 feature 300 and related text at page 5 lines 24-30).

**G. Dependent Claim 36**

Dependent claim 36 recites a system that facilitates control of a build process wherein the means for performing performs the build process at a lowest level of trust of all the one or more build entities used during the build process (*See e.g.*, Fig. 1, features 104, 106, 108 and related text at page 4 lines 20-28).

The “means for” limitations described above are identified as limitations subject to the provisions of 35 U.S.C. §112 ¶6. The structures corresponding to these limitations are identified with reference to the specification and drawings in the above noted parentheticals.

**VI. Grounds of Rejection to be Reviewed (37 C.F.R. §41.37(c)(1)(vi))**

**A.** Whether claims 1-6 and 8-36 are unpatentable under 35 U.S.C. §103(a) over Cymerman (Michael Cymerman, Automate your build process using Java and Ant) in view of Jerger, et al. (U.S. 6,321,334).

**VII. Argument (37 C.F.R. §41.37(c)(1)(vii))**

**A. Rejection of Claims 1-6 and 8-16, 18-20, 22-35 Under 35 U.S.C. §103(a)**

Claims 1-6 and 8-16, 18-20, 22-35 stand rejected as obvious under 35 U.S.C. § 103(a) over Cymerman (Michael Cymerman, Automate your build process using Java and Ant) in view of Jerger, et al. (U.S. 6,321,334). Reversal of this rejection is requested for at least the following reasons. Cymerman and Jerger, et al. alone or in combination fail to teach or suggest all the claimed aspects.

The claimed subject matter provides a mechanism called “sandboxing” of a build platform that allows a developer to safely download, use, and augment their build processes. In one implementation, sandboxing allows the developer to mark different build entities with different levels of trust thereby mitigating the need of developers to fully trust all processes.

Toward that end, claim 1 (and similarly claims 11, 20, and 32) recite *a build process processor that processes one or more build entities; and a policy component that is processed by the build process processor to determine one or more levels of trust within which the build process operates*. The cited art fails to teach or suggest such claimed aspects.

Cymerman teaches utilizing 'Ant' tool to execute an automated build process. Ant facilitates constructing build scripts via a large number of built-in tasks in 'Ant' without any customization. On page 3 of the Final Office Action dated November 23, 2007 it is erroneously contended that 'simple.xml' is a policy component that determines one or more levels of trust for the build process. Rather the file 'simple.xml' is an xml file with a project entity comprising several target entities wherein the first line has information about an overall project to be built with target tasks and related attributes (*See e.g.* Cymerman page 3). However, it fails to teach or suggest setting up a policy that sets a level of trust by which a conditional build process is executed as conceded on page 4 of the Final Office Action dated November 23, 2007.

A secondary document, Jerger, et al., is cited to overcome this deficiency. Jerger, et al. relates to a security model for managing foreign content downloaded from a computer network. It teaches associating security zones with network locations and configurable protected operations corresponding to these zones that control the access to the host system by foreign content downloaded from the computer network (*See e.g.* Jerger, et al. Abstract). The operations corresponding to these security zones are executed based on defined permissions. However, it fails to make up for the aforementioned deficiency of Cymerman as it does not teach or suggest granting or denying permissions to specific build entities as recited in the subject claims.

In view of at least the aforementioned it can be concluded that Cymerman in view of Jerger, et al. fails to teach or suggest all aspects recited in independent claims 1, 11 20 and 32. Therefore, reversal of the rejection of these independent claims and claims dependent there from is respectfully requested.

**B. Rejection of Claims 17, 21 and 36 Under 35 U.S.C. §103(a)**

Dependent claims 17, 21 and 36 stand rejected as obvious under 35 U.S.C. §103(a) over Cymerman (Michael Cymerman, Automate your build process using Java and Ant) in view of Jerger, et al. (U.S. 6,321,334). Reversal of this rejection is requested for at least the following

reasons. Cymerman and Jerger, et al. alone or in combination fail to teach or suggest all the claimed aspects.

The claimed subject matter generally provides for a mechanism called “sandboxing” of a build platform allows the developer to mark different build entities with different levels of trust thereby mitigating the need of developers to fully trust all build entities. In particular, dependent claims 17, 21 and 36 dependent from independent claims 11, 20 and 32 recite similar features namely: ***the build process operates at the permission level that is a lowest level of trust associated with the one or more build entities.*** The cited documents, alone or in combination, fail to teach or suggest such claimed aspects.

Cymerman teaches utilizing ‘Ant’ tool to execute an automated build process. Ant facilitates constructing build scripts via a large number of built-in tasks in ‘Ant’ without any customization and fails to teach or suggest the claimed aspects. Jerger, et al. is used to overcome such deficiency. On page 8 of the Final Office Action dated November 23, 2007 it is erroneously contended that Jerger, et al. teaches the claimed aspects. Jerger, et al. relates to a security model for managing foreign content downloaded from a computer network. It teaches associating security zones with network locations and configurable protected operations corresponding to these zones that control the access to the host system by foreign content downloaded from the computer network (*See e.g.* Jerger, et al. Abstract). At the cited portion, Jerger, et al. teaches editing of permission parameters within three permissions sets associated with each security zone. Accordingly three permission sets are defined for signed and unsigned contents associated with different security zones and user interfaces are employed to allow a user to set permissions for different content from various security zones.

In view of the aforementioned, it is clear that the system of Jerger et al. requires voluntary input from the user in order to run a build process at a specific level of trust. In contrast, the claimed subject matter relates to a build process associated with different entities, each entity with a corresponding level of trust, which is executed at a permission level that is lowest of trust levels associated with the entities. By automatically selecting a lowest trust level from all the trust levels associated with the entities involved in the build process, the claimed subject matter mitigates a need for the user to specify trust levels for each entity as taught by Jerger et al. even while safely executing the build process.

In view of at least the foregoing, it is clear that Cymerman alone or in combination with Jerger et al. fails to render obvious the features of the subject claims. Hence, reversal of this rejection is respectfully requested.

**C. Conclusion**

For at least the above reasons, the claims currently under consideration are believed to be patentable over the cited references. Accordingly, it is respectfully requested that the rejections of claims 1-6 and 8-36 be reversed.

If any additional fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP582US].

Respectfully submitted,  
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**VIII. Claims Appendix (37 C.F.R. §41.37(c)(1)(viii))**

1. A system that facilitates management of a build process, comprising:  
a build process processor that processes one or more build entities; and  
a policy component that is processed by the build process processor to determine one or more levels of trust within which the build process operates.
2. The system of claim 1, the levels of trust include levels that are representative of trusted, semi-trusted, and untrusted.
3. The system of claim 1, the policy component includes one or more policy files that are processed by the build process.
4. The system of claim 1, the policy component includes one or more policy files that are processed by the build process before the one or more build entities are built.
5. The system of claim 1, the one or more entities include at least one of a project, a task, a logger, and operating system (OS) account information.
6. The system of claim 1, at least one of the one or more build entities are each associated with the one or more of the levels of trust, which associations are defined in the policy component via at least one of a user-definable policy file and a default policy file, at least one or both of which are processed to determine the level of trust for the build process.
7. (Cancelled)
8. A computer that employs the system of claim 1.
9. A server that employs the system of claim 1.



10. The system of claim 1, the entity is received at least by one of downloading from a website, as part of an e-mail, and a version control system.
11. A system that facilitates management of a build process, comprising:  
a build process processor that processes one or more build entities; and  
one or more policy files that are processed by the build process processor to determine a permission level within which the build process operates.
12. The system of claim 11, the permission level is based on a level of trust associated with a corresponding entity of the one or more entities.
13. The system of claim 11, the one or more policy files are all processed against the one or more build entities before the build process builds the one or more build entities.
14. The system of claim 11, the one or more policy files each include an association of an entity with at least one level of trust.
15. The system of claim 11, the one or more entities include at least one of a project, a task, a logger, and operating system (OS) account information.
16. The system of claim 11, the build process fails to build the one or more build entities when the permission level is representative of untrusted.
17. The system of claim 11, the build process operates at the permission level that is a lowest level of trust associated with the one or more build entities.
18. The system of claim 11, the one or more policy files are written in XML.
19. The system of claim 11, the one or more policy files are adjusted automatically according to one or more parameters.

20. A computer-readable medium having computer-executable instructions for performing a method for managing a build process, the method comprising:
  - receiving a build process for building one or more build entities;
  - associating at least one of the one or more build entities with a level of trust; and
  - performing the build process at the level of trust.
21. The method of claim 20, the act of associating associates each of the one or more build entities with a corresponding representative level of trust, and the act of performing the build process at the level of trust that is the minimal level of trust of all the one or more build entities.
22. The method of claim 20, further comprising sending a message when the build process fails.
23. The method of claim 20, further comprising providing a level of trust that allows any operation to be performed during the act of performing.
24. The method of claim 20, further comprising providing a level of trust that allows only a minimal set of operations to be performed during the act of performing.
25. The method of claim 20, further comprising providing a level of trust that aborts the build process during the act of performing.
26. The method of claim 20, the act of associating associates one of the one or more build entities with at least two levels of trust.
27. The method of claim 20, further comprising providing a default set of associations between the one or more build entities and one or more levels of trust in the form of a file.
28. The method of claim 20, the level of trust is defined according to at least one of user-defined policy data and default policy data.

29. The method of claim 28, the user-defined policy data overrides the default data where a conflict occurs.
30. The method of claim 20, further comprising storing the association of the build entity with the level of trust in the form of a file to which access is restricted.
31. The method of claim 20, further comprising storing the association of the build entity with the level of trust in the form of a file that further relates the use of system resources with the level of trust.
32. A system that facilitates control of a build process, comprising:  
means for providing an association between at least one of one or more build entities and a level of trust; and  
means for performing the build process at the level of trust.
33. The system of claim 32, further comprising means for storing the association in the format of a file.
34. The system of claim 32, further comprising means for applying the association against new build entities before the build process completes.
35. The system of claim 32, further comprising means for automatically associating a level of trust with a new build entity.
36. The system of claim 32, the means for performing is performed at a lowest level of trust of all the one or more build entities used during the build process.

**IX. Evidence Appendix (37 C.F.R. §41.37(c)(1)(ix))**

None.

**X. Related Proceedings Appendix (37 C.F.R. §41.37(c)(1)(x))**

None.